
MAINE S&L NET NEWS

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Maine School and Library Network
(PUC/NYNEX Project)

Project Questions and Answers

This is the first issue of a newsletter produced by the Maine School and Library Network Advisory Board. We plan to issue newsletters occasionally to update you on the status of the Maine School and Library Network Project. We have gathered the answers to some frequently asked questions which we hope will be informative as you make your plans for connecting to the network.

Computer Hardware

Q. What is the most basic computer configuration a library or school will need to be connected to the network?

A. The best computer for a given site will vary somewhat based on the mix of tasks to which it will be applied. One size doesn't necessarily fit all. For network access you will be well served by one of the following configurations:

PC

80486 or Pentium processor
66 MHZ or faster clock rate
16 MB RAM (8 MB minimum)
500 MB or larger hard drive
Color VGA display card and monitor
24-pin dot-matrix printer, as funds allow
CD-ROM drive and sound card, as funds allow

Macintosh

68040 or Power PC processor
25 MHZ or faster clock rate
16 MB RAM (8 MB minimum)
500 MB or larger hard drive
Mac color monitor
24-pin dot-matrix printer, as funds allow
CD-ROM drive, as funds allow

A network interface card (NIC) is needed for access to the School and Library Network.

In a financial pinch, you could start out with 8 MB of RAM and upgrade later.

Computer Grants

Q. I applied for a computer grant. When will I be notified about the award?

A. So far, 238 schools and libraries have been determined to be eligible for grants. Awards will be made by the first week in July.

Q. I did not meet the May 15, 1996 deadline for computer grants. Can I still apply?

A. Yes. Remember though, a school or library is eligible for a \$2,000 grant only if it has no computer or if the most powerful computer it owns (anywhere in the school or library) is based on a 286 or less processor (PC) or a 68020 or less processor (MAC). A school or library is eligible for a \$600 upgrade grant if the most powerful computer it owns anywhere in the school or library is based on a 386 or a 486 running at less than 50 MHZ (PC) or 68030 running at less than 25 MHZ (MAC). If a school or library owns any computer with a capacity greater than those listed, it is ineligible, regardless of the use that is currently being made of that computer.

Q. What can I purchase with the grant award?

A. Along with your award, you will be mailed a list with the items you can purchase. You must purchase a computer or upgrade your current computer, as applicable, to meet certain minimum specifications for speed and memory. If you have funds remaining, you may put it towards a specified list of items including a printer, larger monitor, CD-ROM drive or Ethernet network interface card. Within 30 days of your purchase, you must return receipts indicating what you have purchased with the grant.

Q. Must I purchase my computer from any particular vendor?

A. No. That choice is being left to each individual school or library. Public schools and libraries may be eligible to purchase a computer under the State of Maine's PC contracts. If you are interested in pursuing this option, you

can call the State Department of Administration and Financial Services, Division of Purchases at 287-3521 for more information about eligibility to purchase a computer under the state contract.

Network Hardware

Q. What is the discussion about FRADs vs. routers all about?

A. Both devices are capable of linking Maine S&L Net with the computers in a particular school or library. As a generalization, the Frame Relay Access Device (FRAD) tends to be somewhat less expensive than a router. Historically, routers have been preferred where larger local area networks are to be supported, or where a higher level of security against unauthorized access by users on the Internet is desired. These considerations come particularly into play where local e-mail and/or web servers are being maintained. While many FRAD manufacturers are racing to add router-like features, routers still seem to have an edge in sophisticated environments.

Q. Will Maine S&L Net provide a FRAD or router?

A. Sites that opt for the standard 56-kbps Frame Relay Service will have the option of taking the FRAD at no cost or receiving a credit of approximately \$1,025 which a school or library can use toward the purchase of a router. Note that selecting this option does not require submission of an Alternate Equivalent Value proposal.

Q. What costs am I likely to incur that will not be covered by the Maine S&L Net Project?

A. Unless you are eligible for a computer grant as described above, sites will have to provide their own computer hardware and any local area network hardware necessary to link one or more systems to the FRAD or router. At a minimum, this is an ethernet interface card (cost \$50 to \$100) and some LAN wire (\$10 to \$100 depending on distance between the computer and the point at which it connects to the FRAD or router). If you wish to link more than one computer and do not already have a LAN in place, you will need to purchase a LAN hub (\$100 to \$200 for the most basic for 4-6 machines). If you are linking an existing localtalk Macintosh LAN you will need a transceiver (\$100 to \$200) to interact with the ethernet protocol running on the FRAD/router. Beyond these basics, site equipment and software needs will be dictated by local choices, e.g., whether to run an in-house mail server so that students can have e-mail.

Schools and libraries receiving computer grants may use their awards for these items once they have met the

minimum hardware specifications. Any expenses in excess of the grant award will be the responsibility of the school or library.

Installation

Q. As I understand it, we need a 4'x4' piece of plywood mounted on the wall for our FRAD. How large is it anyway? If we decide to go with a shelf mount (say, on top of a high bookcase), how big a footprint should I plan for?

A. The actual size of the Frame Relay Access Device is 3" deep by 7" wide by 10" long. The reason for recommending a 4' by 4' plywood backboard is that the backboard would also be expected to hold any other network equipment that your site requires such as modems, HUBS, etc., plus the wiring that supports those devices. Although you could decide to install a shelf mounted device, technical support people strongly recommend a backboard mounted access device based on their experience with both types of setups. The backboard mounted devices are far less susceptible to problems such as broken or loose wires, missing devices, and tampering, plus they are far easier for you to manage. The size of the backboard can be adjusted to fit your location.

Alternative Equivalent Value Proposals

Q. What is the alternative equivalent value service option?

A. Any site or group of sites that would be eligible for a 56-kbps standard connection to the School and Library Network may instead propose that funds equivalent to what would be expended for the 56-kbps standard package be used to defray the costs of some alternate means of service that is at least as good or better than 56-kbps.

Q. How do we know how much money will be available for Alternate Equivalent Value (AEV) service as we plan our connection strategy?

A. The PUC has directed that AEV funding be calculated on a site-specific basis. A variety of factors related to your building's distance from your local telephone company's telecommunications equipment and the unused capacity of lines in your area enter into the calculation. Also included is the cost of a FRAD amortized over the duration of the project. The current best estimate is that, on average, AEV will work out to \$40 to \$50 per month. Some sites, because of peculiar local conditions, may end up with a larger or smaller AEV depending on local requirements or lack of requirements for additional phone infrastructure to support the connection.

All sites that indicate an interest in an AEV approach will be provided with a quote on the amount of money they might employ in this fashion. Note that AEV funds may be drawn down all at once at the beginning of the AEV project, or on a monthly basis.

Q. How can I apply for AEV?

A. You may request an AEV application by checking the AEV box on the Access Tier Selection and Connectivity Form sent to you in April. After you submit the form, the Advisory Board will send you an AEV Application Form. The Board will review your AEV application and recommend to the Commission whether your project will be approved. Your application must indicate the amount of money you will be spending out-of-pocket.

Q. What are the details concerning substituting T-1 or some other service for 56-kbps lines?

A. A group of schools or libraries can request AEV to fund a T-1 or 384-kbps connection. Note, however, that sharing a single T-1 data line presupposes that all sites are linked at a common connection point from which the T-1 line emanates and are eligible for the School and Library Network.

Application Procedure

Q. When will my building get connected?

A. The schedule for connecting the schools and libraries will be based on the date of receipt of the application and readiness (physically ready and technically trained) of the site for connection. The actual connections started in June and will continue over the next year or so. There will be follow-up phone calls to each school or library before installation takes place so you will know when your building is going to be connected well in advance of the connection

date.

Training

Q. What training will be available from the project?

A. There will be both end-user and technical coordinator training provided as part of this project. The end-user training will be coordinated and overseen by the Maine Science and Technology Foundation. The Foundation plans on training up to 2,200 local trainers (two per building) who will then be expected to provide training for teachers, students, librarians and patrons who will be using the network in their localities. The types of topics that will be covered include Training Delivery, Network, WWW Browsers, Mail, FTP, Telnet, Newsgroup, Listserv, Search, Gopher, etc. The training is expected to begin in August and you will be hearing more details about this training soon.

The training for technical coordinators will begin in July and will cover those areas that your technical support person will be responsible for. It is geared to people who have had experience with software, installation of software, and network connection. It will cover areas such as client installation disks, client configuration, TCP/IP Drivers and how to install them on certain configurations. Also provided will be more intensive server training and information as to what is needed on certain Local Area Network setups. These sessions will be offered in northern, central and southern locations. You will be hearing more about this training as you get closer to your installation date because the technical coordinator training will be offered to sites within a few months of the anticipated installation date.

Miscellaneous

Q. What is the name of this project? We've heard SLIIP, PUC/NYNEX project, School and Library Network, and others.

A. It is the "Maine School and Library Network," sometimes abbreviated as "Maine S&L Net."

Q. Should libraries and schools think of this as a once-and-done-with project that will function for years as it does on day 1?

A. No. It is a starting point from which a myriad of local developments may spring. The networking technology, the nature and extent of information available online, the ways in which the link is used at your site will all change over time. This is but a starting point, albeit one substantially in advance of that available to the majority of schools and libraries in the U.S.

Q. What happens after four years?

A. The PUC ruling took effect on May 15, 1995, and was to apply for five years. Therefore, it will run out in late spring of the year 2000. Between now and then, many changes in the technology will take place and other alternatives will be available for the schools and libraries. There are current initiatives at the federal level that will financially support some basic level of technology and network connection for schools and libraries nationwide.

There also could be some form of ongoing financial support for the School and Library Network through state legislative action. It is too early to tell what the ongoing plans will be on either of these two fronts, but you certainly will have more information available well before the scheduled end of this project. It is important to remember, however, that the local school or library will have control of what it does at the end of this five-year time frame without any obligation to continue network connections.

Q. What if I have other questions?

A. You can call the NYNEX Project Manager at 1-800-315-0633. Other information is available at the following websites: Public Utilities Commission, <http://www.state.me.us/mpuc/>; Maine State Library, <http://www.state.me.us/msl/>; and the Department of Education, <http://www.state.me.us/education/>.

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